

**METHODS AND COMPOSITIONS FOR**  
**ENANTIOSELECTIVE OXIDATION REACTIONS**

**ABSTRACT OF THE DISCLOSURE**

This invention provides methods and catalyst systems for catalyzing enantioselective oxidation reactions, including cyclization reactions and enantioselective oxidation reactions of secondary alcohols and other similarly reactive organic substrates. Use of the methods and catalyst systems for kinetic resolution of racemic mixtures of secondary alcohols is also described.